

Melaleuca comosa A.R.Bean (Myrtaceae), a new species from western Queensland

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Summary

Bean, A.R. (2017). *Melaleuca comosa* A.R.Bean (Myrtaceae), a new species from western Queensland. *Austrobaileya* 10(1): 70–73. A new species, *Melaleuca comosa* A.R.Bean is described and illustrated. It is known from a single location near Blackall in western Queensland.

Key Words: Myrtaceae, *Melaleuca*, *Melaleuca comosa*, new species, Australia flora, Queensland flora

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Introduction

In 1984, Rosemary Purdie made the first herbarium collection of an unusual *Melaleuca* species during field work for the Western Arid Region Land Use Study (WARLUS) project. This specimen could not be classified as it had only a few old fruits. In 1995, noted amateur collector Betty Ballingall visited the site and collected another specimen. This one unfortunately also lacked flowers and intact fruits. She nevertheless sent a duplicate to *Melaleuca* expert Lyn Craven, who tentatively identified it as *M. lasiandra* F.Muell. In the recent comprehensive book on the genus (Brophy *et al.* 2013), Ballingall's collection appears as an outlier on their distribution map for *M. lasiandra*. In 2014, Jenni Silcock and Boris Laffineur were able to procure some material bearing senescent flowers and young fruits. Her material is sufficient to confirm that this taxon differs significantly from *M. lasiandra*, and that it does not conform to any other named species. It is described here as a new species.

Materials and methods

This paper is based on examination and measurements of dried herbarium samples at BRI.

Taxonomy

***Melaleuca comosa* A.R.Bean sp. nov.** with similarities to *M. lasiandra*, but differing by the flaky-fibrous, non-papery bark, the shorter leaves with very dense oil glands, the flowers in monads, the glabrous stamens, and the stamen bundles only 3.5–4.5 mm long. **Typus:** Queensland. MITCHELL DISTRICT: 2.5 km SE of New Belton dam, Mt Marlow, 19 September 2014, J. Silcock JLS1650 & B. Laffineur (holo: BRI; iso: CANB, to be distributed).

Melaleuca sp. (Mt Marlow M.E.Ballingall MEB2737); (Bean 2016).

Shrub 2–4 m high, with dense rounded crown. Bark pale to dark grey, flaky-fibrous, not papery, persistent throughout. Branchlets terete to somewhat angular, brown to reddish-brown; hairs dense, white, spreading, eglandular. Leaves simple, entire, spirally arranged. Lamina elliptical to broadly obovate, 7–14.5 × 2.6–5.3 mm, 2.1–3.4 times longer than wide, veinless or with 1–3 veins sometimes faintly visible; oil glands very dense, c. 60 per mm²; hairs simple appressed, silky, 0.1–0.2 mm long, dense on young laminae, becoming glabrous with age; apex acute to mucronate, base cuneate, margins flat. Petioles well developed, 0.8–1.2(–1.4) mm long, flattened. Inflorescences spicate, spikes 15–25 mm long; rachis with dense erect white eglandular hairs; flowers in

monads, 5-(6)-merous, sessile, bracteoles not seen. Hypanthium ovoid-truncate, 2–2.5 mm long, with dense patent white hairs 0.3–0.9 mm long; sepals deltate, 1.2–1.3 mm long, densely hairy on outer surface, sparsely hairy on inner surface, readily deciduous; petals broadly obovate, c. 1.5 mm long, hairs present near base on outer surface, inner surface glabrous, oil glands apparently absent.

Stamens apparently white, in 5(–6) bundles, 8–16 stamens per bundle, bundles 3.5–4.5 mm long, filaments glabrous; anthers versatile, 0.4–0.5 mm long. Ovary 3-locular; summit of the ovary densely hairy; style 6–6.5 mm long, glabrous; stigma slightly expanded. Mature fruits globose-truncate to cupular, 3–3.5 mm long, 3.3–4 mm diameter, sessile, glabrous or glabrescent, valves of capsule enclosed or at rim-level. **Figs. 1–3.**



Fig. 1. *Melaleuca comosa*. A. branchlet with young infructescence $\times 3$; B. mature leaf with copious oil glands $\times 6$; C. staminal bundle $\times 16$; D. immature fruit $\times 12$; E. young developing leaf with silky indumentum $\times 12$. All from *Silcock JLS1650 & Laffineur* (BRI).



Fig. 2. A mature tree of *Melaleuca comosa*. Photo: J. Silcock.

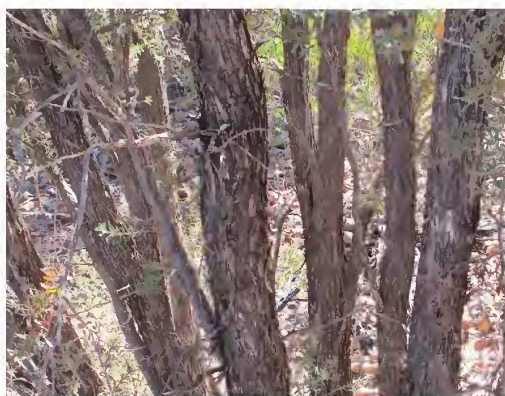


Fig. 3. Bark of *Melaleuca comosa*. Photo: J. Silcock

Additional specimens examined: Queensland. MITCHELL DISTRICT: Mt Marlow Station in Belton paddock, 2.4 km SE along shot line from New Belton Tank, Apr 1995, *Ballingall* MEB2737 (BRI, CANB), Twickenham, second lease on Mt Marlow station, Jul 1999, *Burns* AZ11586 (BRI); c. 11 km WSW of Merrigal homestead, Apr 1984, *Purdie* 2086 (BRI)

Distribution and habitat: Known only from Mount Marlow station, about 180 km SW of Blackall in western Queensland. It grows on drainage channels in deeply gilgaied stony clay soils, adjacent to or with *Acacia cambagei* R.T.Baker.

Phenology: Unknown; the late remnants of flowers have been collected in September.

Affinities: The nearest relative is unknown. *Melaleuca comosa* is similar to *M. lasiandra*, but differs by the flaky-fibrous, non-papery bark, the shorter leaves with very dense oil glands, the flowers in monads, the glabrous stamens, and the stamen bundles only 3.5–4.5 mm long. *M. comosa* is superficially like *M. bracteata*, the only other *Melaleuca* species with non-papery bark from western Queensland. *M. comosa* differs by the unveined or 1–3-veined leaves (5–11-veined for *M. bracteata*), the hypanthium hairs 0.3–0.9 mm long (only c. 0.1 mm long for *M. bracteata*), the 8–16 stamens per bundle (15–25 for *M. bracteata*), flowers in monads (triads for *M. bracteata*), and the lack of persistent leaf-like bracts at the base of each triad.

Conservation status: The total known extent of occurrence for *Melaleuca comosa* is 5 km². The main population covers about 1 km², with outliers seen totalling about 0.1 km², giving a conservative area of occupancy estimate of 1.1 km². The total population is estimated at around 2,200 plants (J. Silcock pers. comm.). Based on the IUCN (2012) criteria, a conservation status of **Vulnerable** (D1 and D2) is proposed.

Etymology: The species epithet is from the Greek *comosus* meaning ‘hairy’, and is given in reference to the dense patent hairs on the flowering hypanthia.

Acknowledgements

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